IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
OCKBORN, Johan *et al.*

Serial No.: 10/709,683

Confirmation No.: 3047

Filed: 05/22/2004

For: METHOD FOR MANUFACTURING A STATOR OR ROTOR COMPONENT

Group Art Unit: 3726

Examiner: JIMENEZ

Atty. Dkt. No.: 07589.0176.PCUS00

Commissioner for Patents
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RESPONSE TO NON-FINAL OFFICE ACTION

INTRODUCTORY COMMENTS:

The following is in response to the Non-Final Office Action mailed April 3, 2006.

AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0038] of the specification with the following replacement paragraph:

[0038] According to FIG. 3, the parts are connected by the disk-shaped or annular member 1 being positioned on a support 9 and the cover ring 3 being moved toward the member 1 in the axial direction; that is to say, vertically from above. The application of the cover ring is illustrated in FIG. ~~1~~ 3 by the force arrow, F.

AMENDMENTS TO THE CLAIMS:

Please amend claim 1 and add claim 15 as follows:

1. (Currently Amended) A method for manufacturing a stator or rotor component (10,12) ~~having~~ by joining at least one blade ~~joined~~ together with at least one ring element (3, 11, 13), said method comprising:

providing a joining material ~~in contact with~~ between the at least one ~~of the~~ blade (2) and the ring element (3,11, 13), the blade (2) and the ring element (3,11, 13) being arranged in relation to one another to be joined together via a butt joint ~~when heat-treated~~ during a heat treatment; and

conducting ~~said~~ the heat-treatment so that the joining material forms a melt that joins the ring element (3,11, 13) and the blade (2) together upon solidification of the melt.

2. (Original) The method as recited in claim 1, wherein a plurality of blades are joined together with the ring element at a mutual spacing about a periphery of said ring element.

3. (Original) The method as recited in claim 1, wherein the ring element forms a ring that is continuous in a peripheral direction.

4. (Original) The method as claimed in claim 1, wherein at least one of said ring elements is joined together in a peripheral direction thereby forming a continuous ring.

5. (Original) The method as claimed in claim 1, wherein said ring element forms an outer ring and the blades are joined together with the outer ring in such a way that said blades project inward in the radial direction from the ring element.

6. (Original) The method as claimed in claim 1, wherein said ring element forms an inner ring and the blades are joined together with the inner ring in such a way that said blades project outward in the radial direction from the ring element.

7. (Original) The method as recited in claim 5 or 6, wherein the ring element is joined together with at least one of (a) a disk-shaped and (b) an annular member further comprising a plurality of blades projecting radially; a first of the ring element and the at least one of (a) a disk-shaped and (b) an annular member is designed with a radially inner surface that is at least partially angled in relation to a central axis thereof and a radially outer surface of a second of the ring element and the at least one of (a) a disk-shaped and (b) an annular member has an essentially correspondingly angled shape; and the ring element and the at least one of (a) a disk-shaped and (b) an annular member are connected via relative axial movement therebetween when the angled surfaces are brought into mutual contact.

8. (Original) The method as recited in claim 7, wherein each of the angled surfaces is conically shaped.

9. (Original) The method as recited in claim 8, wherein said blades are milled out from a basic piece in the radial direction thereby forming said at least one of (a) a disk-shaped and (b) an annular member.

10. (Original) The method as claimed in claim 1, wherein said joining material is provided in the form of a layer (6).

11. (Original) The method as claimed in claim 1, wherein said joining material is applied to a surface of the ring element configured to contact said blades before the ring element and said blades are joined together.

12. (Original) The method as claimed in claim 11, wherein said joining material is applied so that it forms a continuous layer (6).

13. (Original) The method as claimed in claim 1, wherein said joining material is provided in the form of a film.

14. (Original) The method as claimed in claim 1, further comprising:

applying pressure to the ring element and the blade from opposite directions during said heat-treatment.

15. (New) A method for manufacturing a stator or rotor component (10, 12) having at least one blade joined to at least one ring element (3, 11, 13), the method comprising:

providing an annular member (1) having the at least one blade (2) projecting radially from a periphery thereof;

providing the at least one ring element (3, 11, 13), to be arranged outside the at least one blade (2), in the radial direction;

applying a joining material to the at least one ring element (3, 11, 13);

adjusting the position of the annular member (1) relative to the at least one ring element (3, 11, 13) to produce contact of the at least one ring element (3, 11, 13) with the at least one blade (2) wherein the joining material is between the at least one blade (2) and the at least one ring element (3,11, 13), for formation of a butt joint therebetween during a heat treatment thereof; and

conducting the heat-treatment so that the joining material forms a melt that joins the at least one ring element (3,11, 13) to the at least one blade (2) upon cooling of the melt to provide the stator or rotor component (10, 12) produced by attachment of the annular member (1) to the at least one ring element (3, 11, 13).